

SPYWOLF

Security Audit Report

(TESTNET)



Completed on March 6, 2023



OVERVIEW

This audit has been prepared for **Bubble DeFi** to review the main aspects of the project to help investors make make an informative decision during their research process.

You will find a a summarized review of the following key points:

- ✓ Contract's source code
- ✓ Owners' wallets
- ✓ Tokenomics
- ✓ Team transparency and goals
- ✓ Website's age, code, security and UX
- ✓ Whitepaper and roadmap
- ✓ Social media & online presence

The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal

- SPYWOLF Team -







TABLE OF CONTENTS

Project Description		01
Router Contract Information		02
Current Stats		03
Vulnerability Check		04
Found Threats	O C)5-0 6
Good Practices		07
Factory Contract Information		08
Current Stats		09
Vulnerability Check		10
Found Threats		11-12
Good Practices		13
About SPYWOLF		14
Disclaimer		15



BUBBLE DEFI



PROJECT DESCRIPTION

According to their whitepaper:

Bubble DeFi is a decentralized ecosystem creating sustainable liquidity products for decentralized finance (DeFi). The protocol allows users to create their own liquid assets and provides a marketplace for buying/selling them.

Release Date: Launched on February 27, 2023

Category: DeFi/DEX



ROUTER CONTRACT **INFO**

Token Name

N/A

Symbol

N/A

Contract Address

0xDq6802BbEC06Ab447A68294A63DE47eD4506ACAA

Network

Arbitrum TESTNET

Language

Solidity

Deployment Date

Feb 27, 2023

Verified?

Yes

Total Supply

N/A

Status

Launched

TAXES



Sell Tax N/A



Our Contract Review Process

The contract review process pays special attention to the following:

- Testing the smart contracts against both common and uncommon vulnerabilities
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Ensuring contract logic meets the specifications and intentions of the client.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- **Solidity Compiler**
- Hardhat



TOKEN TRANSFERS STATS

Transfer Count	N/A
Uniq Senders	N/A
Uniq Receivers	N/A
Total Amount	N/A
Median Transfer Amount	N/A
Average Transfer Amount	N/A
First transfer date	N/A
Last transfer date	N/A
Days token transferred	N/A

SMART CONTRACT STATS

Calls Count	1
External calls	1
Internal calls	0
Transactions count	1
Uniq Callers	1
Days contract called	1
Last transaction time	Feb-27-2023 07:23:18 AM +UTC
Created	Feb-27-2023 07:23:18 AM +UTC
Create TX	0xae3bdf45d3cda7cf1dc5106a30932624c57 eeb6b983914e9f3d99c6055a1180f
Creator	0xef0f9017a5f8e8b07f2035392704ebfa9be8 c85e





VULNERABILITY CHECK

Design Logic	Passed
Compiler warnings.	Passed
Private user data leaks	Passed
Timestamp dependence	Passed
Integer overflow and underflow	Passed
Race conditions and reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious Event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zeppelin module	Passed
Fallback function security	Passed

SPYWOLF.CO



THREAT LEVELS

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Low Risk

Issues on this level are minor details and warning that can remain unfixed.

Informational

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.



FOUND THREATS

High Risk

No high risk-level threats found in this contract.

Medium Risk

No medium risk-level threats found in this contract.

Low Risk

No low risk-level threats found in this contract.

Informational

This contract is a uniswap/pancakeswap v2 router fork.



RECOMMENDATIONS FOR

GOOD PRACTICES

- Consider fundamental tradeoffs
- Be attentive to blockchain properties
- 3 Ensure careful rollouts
- 4 Keep contracts simple
- Stay up to date and track development

Bubble DeFi ROUTER CONTRACT GOOD PRACTICES FOUND

- ✓ The owner cannot stop or pause the contract
- The smart contract utilizes "SafeMath" to prevent overflows

07

FACTORY CONTRACT **INFO**

Token Name

N/A

Symbol

N/A

Contract Address

0x41189007d7417dac45caa3083f5aa578173a955d

Network

Arbitrum TESTNET

Language

Solidity

Deployment Date

Feb 27, 2023

Verified?

Yes

Total Supply

N/A

Status

Launched

TAXES



Sell Tax N/A



Our Contract Review Process

The contract review process pays special attention to the following:

- Testing the smart contracts against both common and uncommon vulnerabilities
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Ensuring contract logic meets the specifications and intentions of the client.
- Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- **Solidity Compiler**
- Hardhat



TOKEN TRANSFERS STATS

Transfer Count	N/A
Uniq Senders	N/A
Uniq Receivers	N/A
Total Amount	N/A
Median Transfer Amount	N/A
Average Transfer Amount	N/A
First transfer date	N/A
Last transfer date	N/A
Days token transferred	N/A

SMART CONTRACT STATS

Calls Count	1
External calls	1
Internal calls	0
Transactions count	1
Uniq Callers	1
Days contract called	1
Last transaction time	Feb-27-2023 07:02:15 AM +UTC
Created	Feb-27-2023 07:02:15 AM +UTC
Create TX	0x3eda620c1880c47fd9ca87c02252a350a3f dd4b803f0dcd920246313a1d1ffb2
Creator	0xef0f9017a5f8e8b07f2035392704ebfa9be8 c85e





VULNERABILITY CHECK

Design Logic	Passed
Compiler warnings.	Passed
Private user data leaks	Passed
Timestamp dependence	Passed
Integer overflow and underflow	Passed
Race conditions and reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious Event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zeppelin module	Passed
Fallback function security	Passed



THREAT LEVELS

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

High Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Medium Risk

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

Low Risk

Issues on this level are minor details and warning that can remain unfixed.

Informational

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.





FOUND THREATS

High Risk

No high risk-level threats found in this contract.

Medium Risk

No medium risk-level threats found in this contract.

Low Risk

No low risk-level threats found in this contract.

Informational

This contract is uniswap/pancakeswap v2 factory fork.

12



RECOMMENDATIONS FOR

GOOD PRACTICES

- Consider fundamental tradeoffs
- Be attentive to blockchain properties
- 3 Ensure careful rollouts
- 4 Keep contracts simple
- Stay up to date and track development

Bubble DeFi FACTORY CONTRACT GOOD PRACTICES FOUND

- The owner cannot stop or pause the contract
- The smart contract utilizes "SafeMath" to prevent overflows

13



SPYWOLF CRYPTO SECURITY

Audits | KYCs | dApps Contract Development

ABOUT US

We are a growing crypto security agency offering audits, KYCs and consulting services for some of the top names in the crypto industry.

- ✓ OVER 150 SUCCESSFUL CLIENTS
- ✓ MORE THAN 500 SCAMS EXPOSED
- ✓ MILLIONS SAVED IN POTENTIAL FRAUD
- ✓ PARTNERSHIPS WITH TOP LAUNCHPADS, INFLUENCERS AND CRYPTO PROJECTS
- ✓ CONSTANTLY BUILDING TOOLS TO HELP INVESTORS DO BETTER RESEARCH

To hire us, reach out to contact@spywolf.co or t.me/joe_SpyWolf

FIND US ONLINE



SPYWOLF.CO



SPYWOLF.NETWORK



@SPYWOLFNETWORK



@SPYWOLFOFFICIAL



@SPYWOLFNETWORK



@SPYWOLFNETWORK





Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.

While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

DISCLAIMER:

By reading this report or any part of it, you agree to the terms of this disclaimer. If you do not agree to the terms, then please immediately cease reading this report, and delete and destroy any and all copies of this report downloaded and/or printed by you. This report is provided for information purposes only and on a non-reliance basis, and does not constitute investment advice.

No one shall have any right to rely on the report or its contents, and SpyWolf and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers and other representatives) (SpyWolf) owe no duty of care towards you or any other person, nor does SpyWolf make any warranty or representation to any person on the accuracy or completeness of the report.

The report is provided "as is", without any conditions, warranties or other terms of any kind except as set out in this disclaimer, and SpyWolf hereby excludes all representations, warranties, conditions and other terms (including, without limitation, the warranties implied by law of satisfactory quality, fitness for purpose and the use of reasonable care and skill) which, but for this clause, might have effect in relation to the report. Except and only to the extent that it is prohibited by law, SpyWolf hereby excludes all liability and responsibility, and neither you nor any other person shall have any claim against SpyWolf, for any amount or kind of loss or damage that may result to you or any other person (including without limitation, any direct, indirect, special, punitive, consequential or pure economic loss or damages, or any loss of income, profits, goodwill, data, contracts, use of money, or business interruption, and whether in delict, tort (including without limitation negligence), contract, breach of statutory duty, misrepresentation (whether innocent or negligent) or otherwise under any claim of any nature whatsoever in any jurisdiction) in any way arising from or connected with this report and the use, inability to use or the results of use of this report, and any reliance on this report. The analysis of the security is purely based on the smart contracts, website, social media and team.

No applications were reviewed for security. No product code has been reviewed.

